

Effectiveness of the 2002 Survey of Business Owners Questionnaire and Possible Additions to the 2007 Questionnaire

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Abstract

The Survey of Business Owners (SBO), part of the quinquennial economic census, is the only comprehensive, regularly collected source of information on the composition of U.S. businesses by gender, Hispanic or Latino origin, and race. This paper contrasts the 2002 survey questions with predecessor survey instruments; assesses the effectiveness of the 2002 SBO survey forms; identifies changes and additions for 2007; discusses current and ongoing cognitive testing of the 2007 questionnaire; and, within established parameters (*e.g.*, minimizing reporting burdens by using check-boxes and using only one form for all sample cases), invites the Advisory Committee's input on new questions (*e.g.*, on computer or internet use, outsourcing, and exporting).

Questions:

The Bureau seeks both specific and general advice from the Advisory Committee on the content of the 2007 SBO survey instrument:

1. If you could add one question to the 2007 SBO to collect additional information on business owners, what would it be? For example, we might add a question on the reason(s) the owner became self-employed or a business owner.
2. If you had to eliminate a question to make room for a new question, what would it be?
3. Are the following topics good subjects for the 2007 or future SBO questions: geographic area(s) where a business's goods and services are sold, language(s) in which the business conducts transactions, computer usage, e-commerce sales, outsourcing of business functions or services, export sales, and organizational capital?
4. Is the current wording appropriate for the questions on computer usage, outsourcing, export sales, and organizational capital? (See the appended 2007 survey form).

INTRODUCTION

The Survey of Business Owners (SBO), part of the quinquennial economic census, is the only comprehensive, regularly collected source of information on the composition of U.S. businesses by gender, Hispanic or Latino origin, and race. This paper contrasts the 2002 survey questions with predecessor survey instruments; assesses the effectiveness of the 2002 SBO survey forms; identifies changes and additions for 2007; discusses current and ongoing cognitive testing of the 2007 questionnaire; and, within established parameters (*e.g.*, minimizing reporting burdens by using check-boxes and using only one form for all sample cases), invites the Advisory Committee's input on new questions (*e.g.*, on computer or internet use, outsourcing, and exporting).

BACKGROUND—SBO ORIGIN, CHARACTER, PRODUCTS

The Survey of Business Owners (SBO) is part of the economic census program, which is required by law to be taken every five years under Title 13 of the United States Code, Sections 131, 193, and 224. It provides the only comprehensive, regularly collected source of information on the composition of U.S. businesses based on the gender, Hispanic or Latino origin, and race of their owners. The survey defines business ownership as having 51 percent or more of the stock or equity in the business.

First conducted in its current form in 2002, the SBO incorporates many of the purposes and survey questions of three predecessor surveys—the Surveys of Minority-Owned and Women-Owned Business Enterprises (SMOBE/SWOBE) and the Characteristics of Business Owners (CBO). The CBO was designed to augment data published in the 1992 SMOBE/SWOBE, which were limited to number of firms, employment, annual payroll, and gross receipts. While the 1997 SMOBE/SWOBE program continued, the CBO survey was discontinued for 1997 due to a lack of funding. The 2002 SBO survey restored much of what had been in the CBO survey and merged these materials with the SMOBE/SWOBE questions.

Most of the economic census is on an establishment basis (*i.e.*, each location owned by a company is surveyed and tabulated separately). In contrast, the SBO is conducted on a company or firm basis (*i.e.*, the level at which ownership is recognized). The survey covers both firms with paid employees and firms with no paid employees.

The universe for the SBO includes all firms operating during the survey year with receipts of \$1,000 or more that filed income tax returns as individual proprietorships, partnerships, and any type of corporation, except those classified as agricultural production; domestically scheduled airlines; railroads; U.S. Postal Service; mutual funds (except real estate investment trusts); religious grant operations; private households and religious organizations; public administration; and government.

Data on businesses and business owners collected on SBO questionnaires are combined with data collected on the main economic census and data from administrative records to produce a series of published reports on the characteristics of U.S. businesses and business owners. Between January and June 2006, preliminary estimates for the 2002 SBO were published on

Women-, Hispanic-, Black-, Asian-, American Indian- and Alaska Native-, and Native Hawaiian- and Other Pacific Islander-owned businesses. In August 2006, final estimates were released in separate reports to reflect corrections to business ownership made after the preliminary reports were released. Three final reports were published in September 2006: the Company Summary, the Characteristics of Businesses, and the Characteristics of Business Owners.

THE 2002 SBO—DEVELOPMENT AND EFFECTIVENESS OF THE SURVEY INSTRUMENT

The 2002 Survey Instrument

The 2002 survey marked the first time that extensive information on businesses and their owners was collected from all 2.3 million sampled businesses. Samples for predecessor surveys were much smaller and the surveys asked fewer questions. For example, the 1992 CBO collected limited characteristics information from a sample of only 125,000 businesses. In an effort to minimize respondent burden in the 2002 survey, the questionnaire was designed primarily with check box responses and only a few write-in areas.

We designed two questionnaires for this program, the SBO-1 form for partnerships and corporations and the SBO-2 for sole proprietorships and self-employed persons. Businesses that received the SBO-1 form were asked to report the percentage of ownership, gender, Hispanic or Latino origin, race, and several other demographic characteristics for each of the three largest percentage owners. The sole proprietors and self-employed individuals were asked for essentially the same information, but limited to two owners.

New questions on the 2002 survey reflected not only the desire to obtain more detailed and comprehensive information, but also consultations with key stakeholders, including the U.S. House of Representatives Committee on Veterans' Affairs, the Small Business Administration (SBA), the Minority Business Development Agency (MBDA), and the Center for Women's Business Research.

Questions about business owners on the form covered: owner's age; education; veteran status; if the owner is disabled and if this disability was incurred during active military service; primary business function; the average number of hours spent managing or working in the business; and whether the business provided the owner's primary source of income.

Questions about businesses asked for the year the business was established; the year the earliest owner originally established, purchased, or acquired the business; whether the business was home-based or family-owned; whether the business operated as a franchise; which types of customers accounted for 10 percent or more of the business's sales; the business's sources of equity capital; and if the business obtained financing for expansion, capital improvements or start-up during 2002.

In addition to the business questions listed above, sole proprietorships and self-employed persons were asked whether the business or self-employment activity was operated on a part-time basis;

(if yes) to describe the part-time business activity; whether the business is still in operation; (if no) reason(s) for ceasing operation; (if yes) whether the business has expanded in terms of income or hours of operation.

A new question was also added to increase our understanding of the businesses' use of alternative employment arrangements, such as full- and part-time paid employees; paid day laborers; leased employees; contractors, and subcontractors.

Cognitive testing helped us to evaluate the proposed changes. Cognitive interviews were completed with business respondents in 46 firms in seven locations nationwide (Providence RI, Hartford CT, Portland OR, Seattle WA, Honolulu HI, Raleigh-Durham NC, and the local Washington DC area). Particular emphasis was placed on evaluating the effectiveness of collecting individual information from the three largest percentage owners (*i.e.* person level reporting) along with testing variations of the multiple race and Hispanic origin questions.

Major findings of the cognitive testing included the following:

- Proxy reporting was prevalent and included not only employees reporting for their business owners, but also individual business owners reporting for their partners or colleagues. Most respondents were closely related to the business owner(s) by family or marriage, or had close working relationships with the owners.
- With only 2 or 3 exceptions, nearly all respondents correctly associated their person-level reports of owner characteristics with the order of the three business owners listed initially. However, since this strategy is critical to the SBO estimating program, we revised the questionnaire to emphasize this one-to-one ordered association.
- Since nearly all test respondents missed the skip instruction in the initial questions meant to screen certain types of businesses out of the questionnaire, the sequence was simplified.
- Respondents' descriptions of the "primary functions" of the various owners enabled us to revise and clarify the response categories in this question.
- Wide variation in respondents' interpretations of questions on alternative employment arrangements, computer use and e-business processes, and sources of financing resulted in the reconsideration of the intent of these questions, leading to revisions.

To validate the findings from the cognitive testing, in early 2002, the revised form was subjected to a large-scale field test (10,000 cases). Each respondent was asked to complete the questionnaire and an evaluation form. Based upon the responses to the evaluation form, 65 percent of the respondents were able to complete the form in less than 10 minutes; 57 percent thought the form was very easy to complete; 14 percent indicated that they would prefer to complete the form on-line; 65 percent did not find any questions, instructions or directions on the form confusing or difficult to answer (an additional 27 percent did not answer this question).

The 2002 Survey

In August 2003, the 2002 SBO questionnaire was sent to a sample of 2.3 million businesses representing over 22 million firms in the United States. For the 2002 SBO, in response to budgetary concerns and because our research indicated that the majority of businesses are still in operation from one year to the next, our mailout and data collection operations were split into two phases. The employer sample was mailed in September 2003 and the employer births and nonemployer firms (or firms with no paid employees) were mailed in May 2004. Employer businesses made up one-half of the sample cases and nonemployer businesses made up the other half.

The Office of Management and Budget (OMB) mandated an 80 percent response rate. In fact, we surpassed that target, but with considerable effort. We conducted two report form mail follow-ups, a computer-assisted telephone interview follow-up with nearly 30,000 nonrespondents, and a phone call reminder to delinquent respondents. Ultimately about 81 percent of the 2.3 million businesses in the SBO sample responded to the survey. For businesses in both the 1997 and 2002 samples that did not respond to the 2002 survey, results were imputed based on data from the 1997 survey. For the remaining non-respondents, gender, Hispanic or Latino origin, and race were imputed from donor respondents with similar characteristics (state, industry, employment status, size, and sampling frame).

We were concerned at the outset that lengthening the questionnaire would affect responses to individual questions on the report form. However, we were able to obtain virtually all of the information that we requested. Only a small percentage of respondents failed to answer the critical data items of gender, Hispanic or Latino origin, and race. Among respondents, approximately 2.7 percent failed to answer the gender question, 2.6 percent the Hispanic or Latino origin questions, and 3.8 percent the race question.

For 2002, Preliminary Estimates of Business Ownership By Gender, Hispanic or Latino Origin, and Race were released for the first time in the history of the SBO program. In addition, for the first time, the data were also released on American FactFinder. This feature on the Census Bureau's web site allows a data user to retrieve quick reports and summary tables of statistics from the national level to the local level. Data were also available on DVD-ROM and on the Internet.

The published data included numbers of firms and paid employees, gross receipts, and annual payroll by geographic area, industry, and size of firm. The SBO sample was designed to provide reliable estimates at the state level by 2-digit NAICS code. Estimates for Women- and Black-owned firms were published at the national level for 2-, 3-, and some 4-digit NAICS categories and at the state level by 2-digit NAICS category. Estimates for Hispanic-, American Indian- and Alaska Native-, Asian-, and Native Hawaiian- and Other Pacific Islander-owned firms were published at the national and at the state level by 2-digit NAICS category.

Two new reports were released in the 2002 SBO series, the Characteristics of Businesses (CB) and the Characteristics of Business Owners (CBO).

The CB report includes data for respondent firms by gender, Hispanic or Latino origin, and race by industry classification at the U.S. level and by size of firm (employment and receipts). Data were published for both employer and non-employer respondent firms (*i.e.*, all firms that returned their survey forms and provided the gender, Hispanic or Latino origin, and race of the owner(s) or indicated that the firm was publicly held).

The CBO report includes data for the owners of both employer and non-employer respondent firms by gender, Hispanic or Latino origin, and race by industry classification for the U.S. by employment status and business interest.

THE 2007 SBO—DEVELOPMENT OF THE SURVEY INSTRUMENT

Compared to the 2002 version, some significant changes have been made to the 2007 SBO survey form. The 2007 SBO will ask about 4 owners, rather than 3, in order to better identify businesses that are equally-owned by males and females. In addition, for 2007, the two 2002 SBO forms were combined into one comprehensive questionnaire. In addition, in contrast to 2002, all businesses selected in the 2007 SBO sample will receive the same survey form. Combining the previous two forms and sending identical forms to the entire sample will help to reduce printing costs and simplify the data capture, processing and editing of the response data.

A series of screener questions were added (questions 1-5) to help to filter out businesses that are not classifiable by gender, Hispanic or Latino origin, and race. Finally, a check box for “Some other race” was added to each question about the owner’s race. This final change has been mandated by Congress. See Attachment B for a copy of the most recent version of the questionnaire.

At the request of the survey’s data users, new questions have also been added. These include year and means by which each listed owner acquired the business; if each listed owner had previously owned a business or been self-employed; whether each listed owner was born in the United States; the number of owners of the business as of December 31; the total amount of capital used to start or acquire the business; whether the business had forgone expansion or capital improvements due to a lack of access to capital; the percent of the business’s total sales of goods and services that were exported; geographic area(s) where the business’s goods and services were sold; the language(s) in which the business can conduct transactions; whether the business established operations outside the U.S.; whether the business outsourced or transferred any business function or service to a company outside the U.S.; and the business’s use of the Internet and e-commerce.

Cognitive Testing

Beginning in December 2006, and continuing through May of this year, cognitive interviews will be conducted with approximately 75 companies, divided among three test rounds. The companies selected for these interviews were in the sample for the 2002 SBO and were still in business in 2005-2006. These companies vary in size, industry, number of owners, and combinations of gender, race, and Hispanic or Latino business ownership characteristics.

Interviews will be conducted at each business site by staff from the Establishment Survey Methods Staff in the Economic Directorate of the Census Bureau. A subject area specialist will accompany the interviewer on each interview to observe and provide additional clarification of the subject matter. Participants will be informed that their response is voluntary and that the information they provide is confidential and will be used only for research purposes.

The company interviews will help us evaluate the question wording and order, response strategies, navigation, and respondent burden. We are interested especially in:

- Respondents' interpretation and understanding of both new and revised questions.
- Response strategies and respondent identity when proxy respondents report for one or more business owners.
- Response strategies for identifying the business owners for whom to report, and respondents' abilities to maintain those identities when answering person-level questions.
- Respondents' abilities to follow "Skip" instructions.
- Respondents' interpretation of and response strategies for the new person-level and business-level questions and response categories.
- Respondents' abilities to answer questions appropriately and in the manner in which the questions were intended.

The first round of cognitive testing (26 interviews) occurred between December 5, 2006 and February 1, 2007. The findings in **Attachment A** were used to make modifications to the SBO questionnaire to reduce respondent variation in question comprehension.

Unlike the 2002 SBO program, preparation of the 2007 survey form will not include a pretest. This decrease reflects questionnaire changes in 2007 far less complex than in previous years.